



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0904; Product Identifier 2019-SW-041-AD; Amendment 39-21864; AD 2021-05-03]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus Helicopters Model EC225LP helicopters. This AD requires various inspections of the left-hand side (LH) engine fuel supply (fuel supply) hose and depending on the inspection results, reinstalling the fuel supply hose or removing the fuel supply hose from service. Additionally, this AD requires installing an improved part and prohibits installing a certain part-numbered LH fuel supply hose on any helicopter unless it is installed by following certain procedures. This AD was prompted by a report of an incorrect installation of the LH fuel supply hose causing restricted fuel flow to the LH engine. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or 800-232-0323; fax (972) 641-3775; or at

<https://www.airbus.com/helicopters/services/technical-support.html>. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. It is also

available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0904.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0904; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Union Aviation Safety Agency (EASA) AD, any comments received, and other information. The street address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant Plaza N SW, Washington, DC 20024; telephone (202) 267-9167; email hal.jensen@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model EC225LP helicopters with a LH fuel supply hose part number (P/N) 704A34416087 installed. The NPRM published in the *Federal Register* on October 7, 2020 (85 FR 63235, October 7, 2020). For helicopters delivered to the first operator before November 30, 2018, and for helicopters delivered to the first operator on or after November 30, 2018, that have had the LH fuel supply hose replaced or reinstalled before May 10, 2019, the NPRM proposed to require visually inspecting the LH fuel supply hose for twisting, and if needed, borescope inspecting the entire length of the inside of the fuel supply hose for twisting. Depending on the inspection results, the NPRM proposed to require reinstalling or removing the fuel supply hose from service. Additionally, the NPRM proposed to prohibit installing a certain part-numbered LH fuel supply hose on any helicopter unless that LH fuel supply hose is installed by following certain procedures specified in the manufacturer's service bulletin. The proposed requirements were intended to prevent a

decrease of the LH engine power when accelerating to a power setting corresponding to One Engine Inoperative (OEI) power and subsequent reduced control of the helicopter.

The NPRM was prompted by EASA AD 2019-0092, dated April 26, 2019 (EASA AD 2019-0092), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for Airbus Helicopters (formerly Eurocopter) Model EC 225 LP helicopters, all serial numbers. EASA advised that an occurrence was reported where during an in-flight single engine power check, the LH side engine experienced a power loss. EASA stated that a subsequent investigation determined that the fuel flow to the affected engine was restricted by a twisted fuel supply hose. EASA stated that this condition, if not detected and corrected, could lead to a decrease of the LH engine power when accelerating to the power setting corresponding to OEI power, and subsequent reduced control of the helicopter. Accordingly, EASA AD 2019-0092 required a one-time visual inspection of the fuel supply hose and depending on the inspection results, removing from service or replacing the affected part. EASA AD 2019-0092 also introduced re-installation requirements for a fuel supply hose that is being replaced or reinstalled.

After the FAA issued the NPRM, the FAA issued a supplemental notice of proposed rulemaking (SNPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model EC225LP helicopters with a LH fuel supply hose P/N 704A34416087 installed. The SNPRM published in the *Federal Register* on May 10, 2021 (86 FR 24783, May 10, 2021) (the May 2021 SNPRM). The May 2021 SNPRM proposed to require visually inspecting the LH fuel supply hose P/N 704A34416087 for twisting, and if needed, borescope inspecting the entire length of the inside of the fuel supply hose for twisting. Depending on the inspection results, the May 2021 SNPRM proposed to require reinstalling or removing the fuel supply hose from service. Additionally, the May 2021 SNPRM proposed to prohibit installing a certain part-numbered LH fuel supply hose on any helicopter unless that LH fuel supply hose is installed by following certain procedures specified in the manufacturer's service bulletin.

The May 2021 SNPRM was prompted by the FAA's determination that operators may not have the information required to comply with the proposed requirements in the

NPRM. Operators may not know the date the helicopter was delivered to the first operator. Additionally, operators may not know whether the LH fuel supply hose has been previously removed or reinstalled since the maintenance regulations do not require certain operators to maintain these records after one year.

Accordingly, the FAA determined that revising proposed paragraph (e)(1) of the NPRM by deleting the language referring to delivery dates and dates of LH fuel supply hose replacement or reinstallation was necessary. As a result of these changes, the FAA revised the NPRM to specify that all helicopters included in the applicability paragraph would be required to comply with the proposed requirements in the May 2021 SNPRM. Also, after the NPRM was issued, the FAA determined that a limit on special flight permits was required. The May 2021 SNPRM reflected this change and stated that special flight permits may be permitted provided that there are no passengers on board.

Since the May 2021 SNPRM was issued, EASA issued EASA AD 2021-0156, dated July 2, 2021 (EASA AD 2021-0156), which supersedes EASA AD 2019-0092. EASA advises that Airbus Helicopters has developed an improved fuel supply hose P/N 704A34416101 and modification instructions to install the improved part. Accordingly, EASA AD 2021-0156 retains the requirements of EASA AD 2019-0092 and requires replacing the affected part with the improved part. EASA AD 2021-0156 also allows a terminating action for the inspection requirements once the improved part has been installed according to the installation requirements.

Accordingly, the FAA issued a second SNPRM to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model EC225LP helicopters with a LH fuel supply hose P/N 704A34416087 installed. This SNPRM published in the *Federal Register* on September 7, 2021 (86 FR 49937, September 7, 2021) (the September 2021 SNPRM). The September 2021 SNPRM proposed to require visually inspecting the LH fuel supply hose for twisting, and if needed, borescope inspecting the entire length of the inside of the fuel supply hose for twisting. Depending on the inspection results, the September 2021 SNPRM proposed to require reinstalling or removing the fuel supply hose from service.

Additionally, the September 2021 SNPRM proposed to prohibit installing a certain part-numbered LH fuel supply hose on any helicopter unless that LH fuel supply hose is installed by following certain procedures described in the manufacturer's service bulletin. Finally, the September 2021 SNPRM proposed to require modifying your helicopter by removing from service LH fuel supply hose P/N 704A34416087 and installing the improved LH fuel supply hose P/N 704A34416101. This modification would provide terminating action for the proposed inspection requirements of the September 2021 SNPRM.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from six commenters on the September 2021 SNPRM. Five commenters supported the SNPRM without change and one individual supported the SNPRM but requested a certain change. The following presents this comment and the FAA's response.

Request to Revise the Required Actions Section to Include Additional Inspections

One individual requested that the FAA revise the Required Actions section of this AD to include repetitive inspections of the LH fuel supply hose for one year after initial installation of the new supply hose. The individual stated this will ensure maximum safety and efficiency.

The FAA disagrees with this request because the unsafe condition is adequately addressed by installing the improved fuel supply hose in accordance with this AD.

Conclusion

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin No. EC225-

71A019, Revision 2, dated May 21, 2021 which specifies procedures for removing the fuel supply hose from the LH power plant, visually inspecting the fuel supply hose for twisting, and depending on inspection results, performing an endoscope inspection on the inside of the hose. This service information also specifies procedures required to install the improved fuel supply hose.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA also reviewed Airbus Helicopters Alert Service Bulletin No. EC225-71A019, Revision 1, dated February 28, 2019, which also specifies procedures for removing the fuel supply hose, visually inspecting the fuel supply hose for twisting, performing an endoscope inspection on the inside of the hose, and specifies procedures required to install a serviceable fuel supply hose.

Differences Between this AD and EASA AD 2021-0156

EASA AD 2021-0156 requires compliance within 110 flight hours or 6 months, whichever occurs first after the effective date of EASA AD 2019-0092, while this AD requires compliance within 110 hours time-in-service after the effective date of this AD. EASA AD 2021-0156 requires reporting information to Airbus Helicopters if the LH fuel supply hose is twisted on the inside, while this AD does not. Additionally, EASA AD 2021-0156 is applicable to all serial-numbered EC225LP helicopters, whereas this AD applies to EC225LP helicopters with a certain LH fuel supply hose installed.

Costs of Compliance

The FAA estimates that this AD affects 28 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Visually inspecting the LH fuel supply hose for twisting takes about 1 work-hour for an estimated cost of \$85 per helicopter and \$2,380 for the U.S. fleet.

Replacing a LH fuel supply hose takes about 8 work-hours and parts cost about

\$2,363 for an estimated replacement cost of \$3,043 per replacement.

Borescope inspecting the LH fuel supply hose takes about 8 work-hours for an estimated cost of \$680 per helicopter.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-05-03 Airbus Helicopters: Amendment 39-21864; Docket No. FAA-2020-0904;
Product Identifier 2019-SW-041-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER
DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Model EC225LP helicopters, certificated in any category, with a left-hand side (LH) engine fuel supply (fuel supply) hose part number (P/N) 704A34416087 installed.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 2820, Aircraft Fuel Distribution System.

(e) Unsafe Condition

This AD was prompted by a report of an incorrect installation of the LH fuel supply hose P/N 704A34416087. The FAA is issuing this AD to prevent restricted fuel flow to the LH engine. The unsafe condition, if not addressed, could result in a decrease of the LH engine power when accelerating to a power setting corresponding to One Engine Inoperative power and subsequent reduced control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 110 hours time-in-service (TIS) after the effective date of this AD, visually inspect the LH fuel supply hose for twisting as shown in Figures 1 and 2 of

Airbus Helicopters Alert Service Bulletin No. EC225-71A019, Revision 2, dated May 21, 2021 (ASB EC225-71A019 Rev 2). If the LH fuel supply hose has any twisting, before further flight, borescope inspect the entire length of the inside of the fuel supply hose for twisting as shown in Figures 3 through 5 of ASB EC225-71A019 Rev 2.

(i) If the inside of the LH fuel supply hose has any twisting, before further flight, remove the LH fuel supply hose from service and install an airworthy LH fuel supply hose by following the Accomplishment Instructions, paragraph 3.B.3.b, of ASB EC225-71A019 Rev 2.

(ii) If the LH fuel supply hose does not have any twisting, reinstall the LH fuel supply hose by following the Accomplishment Instructions, paragraph 3.B.3.b, of ASB EC225-71A019 Rev 2.

(2) Within 1,200 hours TIS after the effective date of this AD, modify your helicopter by removing from service LH fuel supply hose P/N 704A34416087 and installing the improved LH fuel supply hose P/N 704A34416101 in accordance with the Accomplishment Instructions, paragraph 3.B.3.b, of ASB EC225-71A019 Rev 2.

(3) As of the effective date of this AD, do not install a LH fuel supply hose P/N 704A34416087 on any helicopter unless it is installed by following the Accomplishment Instructions, paragraph 3.B.3.b, of ASB EC225-71A019 Rev 2.

(h) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g)(1) of this AD, if those actions were performed before the effective date of this AD using Airbus Helicopters Alert Service Bulletin No. EC225-71A019, Revision 1, dated February 28, 2019.

(i) Special Flight Permits

Special flight permits may be permitted provided that there are no passengers on board.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant Plaza N SW, Washington, DC 20024; telephone (202) 267-9167; email hal.jensen@faa.gov.

(2) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2021-0156, dated July 2, 2021. You may view the EASA AD at <https://www.regulations.gov> in Docket No. FAA-2020-0904.

(I) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Airbus Helicopters Alert Service Bulletin No. EC225-71A019, Revision 2, dated May 21, 2021.

(ii) [Reserved]

(3) For service information identified in this AD, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 8, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-27638 Filed: 12/22/2021 8:45 am; Publication Date: 12/23/2021]